JA

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,458	12/03/2003	Masaru Kohno	0229-0782P	4040

2292 7590 02/08/2005

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER	
BLAU, STEPHEN LUTHER	
ART UNIT	**PAPER NUMBER**
3711	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/725,458	KOHNO, MASARU	
	Examiner	Art Unit	
	Stephen L. Blau	3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) *10-12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/3/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 10-12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 17 December 2005. The argument that search and examination of Species 1 would significantly overlap with the search and examination of all the embodiments is disagreed with. The evidence is that there is not just one subclass for heel weighted heads. The examiner would have to perform independent searches for each different way which is used to heel weight a head. The argument that all of the embodiments share essentially the recited features of inertia is agreed with. However all heads have inertial values and the embodiments do not share the same structure for the weighting. There are many different heel weighted heads and each head has the feature of inertia. As such the restriction is proper and stands.

Specification

2. The specification is objected to under 37 C.F.R. rule 1.71 as not being written in a clear and exact way to enable one skilled in the art to make the same. Specifically in page 8 lines 18-25 it states the sole portion 5 is grounded on the plane HP in a state

where the face angle of the hitting face 2 is zero. In order to make the face angle zero, as shown in Fig. 4, it is sufficient to rotate the head 1 around the axial center line CL in such a manner that a horizontal tangent line N which is contact with a center of gravity FC of area of the hitting face 2 is in parallel to the vertical plane VP1. It is unknown what orientation the head is in for the measuring state with the face angle is set to zero. In Figure 4 it is uncertain what angle is being mention and if it is zero. None of the drawings or the specification show or explain what angle must be zero. With the sole grounded figure 4 shows the loft angle of the face not set to zero with respect to the vertical plane. In addition, it is uncertain how to rotate the head 1 around an axial center line in such a manner a horizontal tangent line N is located which is contact with a center of gravity FC of area of the hitting face 2 is in parallel to the vertical plane VP1. Line N in figure 3 seems that it always will be parallel to a vertical plane VP1 when the sole is grounded to the plane HP (Fig. 4). Why does the head need to be rotated?

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it

pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 9 is not enabling to one skilled in the art in that it is unknown what orientation the head is in for the measuring state with the face angle is set to zero. None of the drawings or the specification show or explain what angle must be zero.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-2 and 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The equations 200 x L – 2000, 200 x L – 4500, and 200 x L – 5000 can be calculated different ways. The examiner recommends placing parenthesis in the equations to limit the different ways (i.e. (200 x L) – 2000) to remove this rejection.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over 2001-299968 in view of Stites.

2001-299968 discloses a wood head having a moment of inertia M around a center line of a shaft being 4661 gxcm^2 (Page 5, Table, Verbal Translation).

2001-299968 lacks a depth L of center of gravity being 30 <= L <= 50 such that L and M meet the conditions as claimed in claims 1-8. Stites discloses a wood type head in the form of a driver (abstract, Fig. 1) having a lateral distance from a lower edge of a face to a center of gravity (CGx) being (Col. 5, Lns. 50-51) between 1.5 to 2.65 inches (Col. 6, Lns. 39-40). In view of the patent of Stites it would have been obvious to modify the head of 2001-299968 to have a depth L of center of gravity being 42 mm in order to utilize a depth of a center of gravity used on the market place for woods. As such the head would meet the equations of claims 1-8.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over 2001-299968 in view of Stites as applied to claims 1-8 above, and further in view of Rice.

2001-299968 discloses a heavy specific gravity material placed at the heel side of a heel (Figs. 4-5, Verbal Translation page 6, Right Col. for reference number 8).

2001-299968 lacks a weight member having a great specific gravity firmly attached to a sole portion in an area where a center of gravity of the weight member being set to .2-.7 times of the xm value in the X-coordinate and set to .1-.5 times of the ym value in the Y-coordinate.

Stites discloses a weight on a sole which moves a center of gravity lower and rearward (Fig. 2, Ref. No. 94). Rice discloses a weight member (26) having a great specific gravity (Col. 4, Lns. 23-26) firmly attached to a sole portion in an area where a center of gravity of the weight member being set to .2-.7 times of the xm value in the X-coordinate and set to .1-.5 times of the ym value in the Y-coordinate (Fig. 3). In view of patent of Rice and Stites it would have been obvious to modify the wood of 2001-299968 to have a weight member having a great specific gravity firmly attached to a sole portion in an area where a center of gravity of the weight member being set to .2-.7 times of the xm value in the X-coordinate and set to .1-.5 times of the ym value in the Y-coordinate in order to utilize an alternative method of weighting a heel, rear and sole side of a wood when the weighting method of 2001-299968 is not available or less convenient.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 1-166781 discloses a driver wood in the form of a #1 wood head having a moment of inertia M around a center line of a shaft being 4500 gxcm^2 (Verbal Translation figure 1, table 2). 2000-210398 disclose a wood having a moment of inertia M around a center line of a shaft (Verbal Translation, table, page 3) being 5200, 5500, 5800, or 6000 gxcm^2 with a center of gravity depth from a face being 35 mm.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Blau whose telephone number is (571) 272-4406. The examiner is available Monday through Friday from 8 a.m. to 4:30 p.m.. If the examiner is unavailable you can contact his supervisor Greg Vidovich whose telephone number is (571) 272-4415. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858. (TC 3700 Official Fax 703-872-9306)

slb/ 3 February 2005

STEPHEN BLAU
PRIMARY EXAMINER